

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022039**Date Inspected:** 18-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shi Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14, OBG 14W (NWIT # 08571)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SA8509-001-019~036, 038

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W:

Repair welding of weld joint no: SEG3020BB-109 [Anchor Plate (AP) 3032A to Vertical Shear Plate SA3442A, Complete Joint Penetration (CJP) weld at panel point (PP) 126]. The welder is identified as 066398 and was

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observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Wang Jiang Hua. The welding variables recorded by this QA appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR 2859 Rev-0. Attached photograph provide additional details.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AW-089 (Side Plate 3132A to Side Plate SP3145B, CJP weld). The welders are identified as 067520 & 037779 and were observed welding in the 2G position. AB/F QA was identified as Mr. Shen Jian. The welding variables recorded by QA appeared to comply with WPS: B-P-2212-Tc-U4b-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020AJ-390, 398 [I-rib stiffener to I-rib stiffener on Bottom Plate (BP) 3089A, complete joint penetration (CJP) weld at PP127.3]. The welder is identified as 045175 and was observed welding in 3G position. ZPMC Quality Control (QC) was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with welding procedure specification (WPS): B-T-2233-ESAB.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AJ-286 [I-rib stiffener (RS3517N) to Bottom Plate (BP) 3088A, complete joint penetration (CJP) weld at PP127.5]. The welder is identified as 070432 and was observed welding in 2G position. ZPMC Quality Control (QC) was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with welding procedure specification (WPS): B-P-2212-Tc-U4b-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AL-206, 211 [I-rib stiffener (RS3522X) to I-rib stiffener (RS3523C) on Side Panel (SP) 3141C, complete joint penetration (CJP) weld at PP126.5]. The welder is identified as 069896 and was observed welding in 4G position. ZPMC Quality Control (QC) was identified as Mr. Sun Tian Liang. The welding variables recorded by this QC appeared to comply with welding procedure specification (WPS): B-P-2214-B-U2-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AL-207, 212 [I-rib stiffener (RS3523C) on Side Panel (SP) 3141C to Floor Beam (FB) 3319A, complete joint penetration (CJP) weld at PP126.5]. The welder is identified as 069896 and was observed welding in 4G position. ZPMC Quality Control (QC) was identified as Mr. Sun Tian Liang. The welding variables recorded this QC appeared to comply with welding procedure specification (WPS): B-P-2214-Tc-U4b-FCM-1.

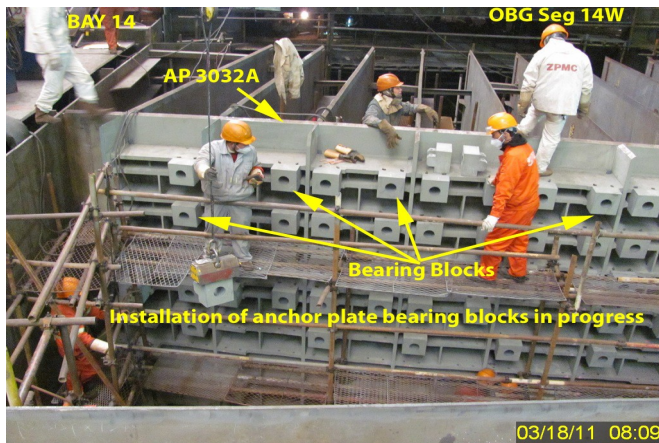
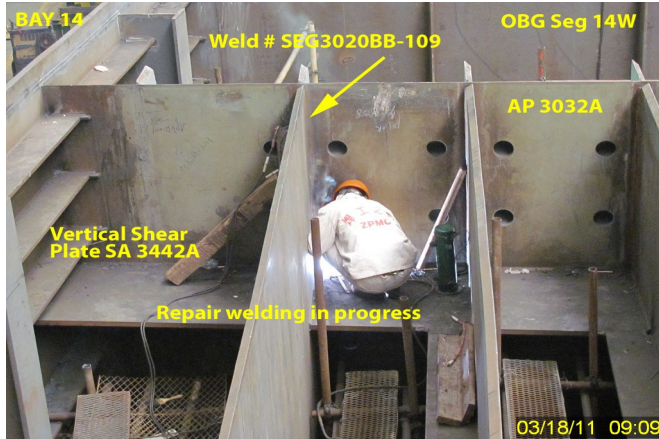
During random in process inspection this QA inspector observed the installation of top anchorage plate AP3013A/3014A/3015A/3016A from panel point 125 to panel point 127 at north side of OBG segment 14W. See attached photograph for more details.

During random in process inspection this QA inspector observed that ZPMC personnel were performing installation of anchor plate bearing blocks at panel point 126. See attached photographs for more details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Umesh

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer